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ABSTRACT

Recent calls for educational reform have focused on secondary schools, but results emerging from a cross-national study suggest that the reasons for American students' achievement problems lie not only in American schools but also in American homes. In the study, American, Taiwanese, and Japanese first and fifth graders were tested in reading and math, parents were interviewed, and classrooms were observed. Results showed that the American students were behind their Asian counterparts in both reading and math. The data indicate that the results cannot be explained by differences in cognitive ability, parents' educational status, or teacher training or experience. Major differences did appear, however, in the amount of time spent in school and in the proportion of school time spent on instruction (less for Americans in both cases). Other differences included the following: (1) outside school, American children spent more time playing, performing household chores, and sleeping; (2) American mothers were the most positive about their children's performance and the most likely to value ability over effort; and (3) American mothers believed communication and taking an interest in their children to be the most important factors in helping them do well in school; a much greater number of Japanese mothers favored helping the child with homework, reading, and other school subjects. (CMG)

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REPORT

Making the Grade: School Achievement in Japan, Taiwan, and the United States

Harold W. Stevenson

The following report is based on a talk given on April 29, 1983, to the Center's Board of Trustees.

The reports of the National Commission on Excellence in Education and of several other studies of American education became front-page news in the late spring of 1983. The reports offered a forceful and depressing description of the scholastic performance of American children. The children's average levels of achievement are low, not only in relation to their peers of previous years, but, even more disturbingly, in relation to their present-day counterparts in other countries. This news is cause for serious concern. The achievement levels of the nation's pupils have obvious implications for future advances in technology, science, and industry. Without well-educated scientists, engineers, and workers, it will be exceedingly difficult for the United States to make the innovations necessary to maintain its technological and industrial position in the late years of the twentieth century.

None of this has been lost on presidential aspirants, who have begun to include education as a campaign issue for the 1984 election. Sharp differences already have emerged in their recommendations for rectifying the present situation.

The recommendations made by the Commission and in the other reports concentrate on the nation's secondary schools, a questionable emphasis. Results emerging from a large cross-national study we have been conducting for the past several years suggest that we cannot focus solely on improving the performance of high schools students.[1] Our children lag behind those of other countries a few months after they enter first grade. It would appear, therefore, that our national problem lies not only in American schools, but also in Ameri-

[1]This study has involved the collaboration of many persons, including Shin-ying Lee, James Stigler, and William Lucker in the United States, Professor Seiro Kitamura in Japan, and Professor C. C. Hsu in Taiwan. This research was supported by the National Institute of Mental Health (MH-30567).

can homes. When differences in achievement arise so early in the child's formal education, more must be involved than inadequate educational practices in the first grade. Improving secondary education is an important goal, but efforts concentrated on secondary-school students may come too late in their academic careers to be effective.

The Study

The stimulus for our research did not come initially from an interest in comparing school achievement of American children with that of children in other countries. Rather, we were interested in reports of clinicians and educators who claimed that reading disabilities, a common problem among American school children, were rare among Chinese and Japanese children. Arguments to support this claim centered upon the differences in the writing systems used in Chinese, Japanese, and English. However, no empirical evidence had been reported to support these claims, and we soon discovered why this was the case. No reading tests existed in Chinese, and the only tests we could find in Japanese were those designed for group administration. Comparing scores of Japanese and American children on reading tests was impossible because the two sets of tests were not comparable. Before we could collect any data, therefore, we found it necessary to construct a reading test. For the test to be useful, the content of the Chinese, Japanese, and English versions had to be comparable, and the test had to be culturally fair, reliable, and interesting. Details of the test's construction cannot be given here, but a team of bi- and tri-lingual researchers spent nearly a year ensuring that the test met these standards. The test was based on meticulous analyses of the words, grammatical structures, and story content in the elementary school textbooks used in the three countries where we were to conduct our research: Taiwan, Japan, and the United States. Since we were interested in relating reading to other academic skills, we also constructed a mathematics test in a similarly meticulous manner.

A second major task was to select the children for our research. Funds were sufficient to work in only one city in each country. To represent the United States, we selected children in Minneapolis. There were several reasons for this choice, but the most important was that the residents of Minneapolis tend to come from native-born, English-speaking, economically sound families. Few are from a minority background. These factors, we assumed, would provide an advantageous cultural, economic, and linguistic environment for learning to read English. If problems were found in Minneapolis, we assumed they would be compounded in other American cities where a greater proportion of the children would have English as a second language, be from economically disadvantaged homes, and have parents whose cultural background diverges from the typically middle-class milieu to which American elementary school curricula generally are addressed.

The Japanese city we chose as most comparable to Minneapolis was Sendai, which is located in the Tohoku region several hundred miles northeast of Tokyo. It, too, is a large, economically successful city, with little heavy industry and with a status within Japanese culture similar to that of Minneapolis in the United States. Taipei was the Chinese city in which it was most feasible for us to conduct our research, in terms of language, size, colleagues, and other factors.

Having chosen the cities, we had to be sure that we tested a representative sample of children. To accomplish this, ten schools in each city were selected to provide a representative sample of the city's school children. We wanted to test children shortly after they entered school and also near the end of their elementary education. Thus we chose, at random, two first-grade and two fifth-grade classrooms in each school. Since the age of school entrance is the same in all three countries and there is universal attendance in elementary school, the children from each country's sample should have been comparable in chronological age and in range of ability.

All children in these 120 classrooms were administered the reading test—nearly 5,000 children in the three countries. (Throughout the study, all tests were given individually, to one child at a time.) In view of the other information we wished to obtain, a sample of this size was impossibly large. To serve as the subjects for the rest of the

study, therefore, we randomly selected six boys and six girls from each classroom. This procedure resulted in a sample of 240 first graders and 240 fifth graders from each city. These 1,440 children were studied intensively. They were given, individually, the mathematics test and a battery of cognitive tasks. The children's mothers were interviewed and their teachers responded to an extensive questionnaire. Each child was observed for 20 randomly selected 40-minute periods over several weeks. The tests, interviews, and observations were made at comparable times within the school year in each country. These procedures yielded an enormous array of information, only a glimpse of which can be presented here.

Achievement Scores

Scores from the achievement tests can be summarized in many ways. One of the most striking comes from the frequency of high and low scorers in each city. For this purpose, we combined the data for the children from all three cities and selected the 100 children who received the top scores in reading and the 100 children who received the lowest scores. The procedure was repeated for the mathematics test.

American children tended to be overrepresented among both the best and the worst readers. If children in the three cities perform comparably, approximately 33 children from each country should be among those receiving the top 100 scores. Similarly, there should be approximately 33 children from each country among those receiving the lowest 100 scores. Among first graders, however, 47 American children were in the bottom group according to their scores on reading vocabulary items, and in scores related to their comprehension of what they had read, there were 56 American children in the bottom group. Corresponding numbers for the fifth grades were 43 and 47. In each case, therefore, the number of American children among the worst readers greatly exceeded the number we would expect if reading skills in the three cities were equivalent.

The group of top readers also tended to include a greater number of American children than would be expected. In reading vocabulary, 47 American children were among those receiving the top 100 scores at first grade, although in scores on reading comprehension there were 32 American first graders. The corresponding numbers for fifth graders were 40 and 56.

Results for the mathematics test were more startling. Among the 100 students from the three cities who received the lowest scores, there were 58 American children at the first-grade level and 67 at fifth grade. Among the 100 top first graders in mathematics, there were only 15 American children. And only one American child appeared among the top 100 fifth graders. In whatever way the data are summarized, the poor performance of American children is evident. For example, among the 20 American fifth-grade classrooms, in not one classroom was the average score on the mathematics test equivalent to that of the children in the worst-performing Japanese classroom.

We conclude that although there are American children who read very well, a disproportionate number do poorly in reading. Hypotheses about the writing systems used in the three languages may be relevant to the discussion of why this should be the case. Such hypotheses are of little help, however, in interpreting the devastating findings in mathematics, where very few American children are on a par with their Chinese and Japanese peers. Something is obviously awry, and numerous hypotheses can be suggested to account for these findings. Fortunately, many of these hypotheses can be evaluated on the basis of the data that were collected about the children and their families. The evidence relevant to a number of these hypotheses appears in the following sections.

The Search for Explanations

Intelligence. A positive relation between children's intellectual level and academic achievement is commonly reported. Perhaps the reason for the differences in level of achievement is that the Chinese and Japanese children simply are brighter than the American children and learn more readily. This interpretation can be evaluated by comparing the scores on the cognitive tasks administered as part of our study. The evidence was negative. American children displayed no

general tendency to receive lower scores. By the fifth grade, for example, scores on such tasks as vocabulary and general information yielded no significant differences between countries. On some other tasks the American children performed most effectively, while on still others the Chinese and Japanese children received the highest scores. There is no evidence of general cognitive inferiority among American children, and when data supporting such a hypothesis are reported (e.g., Lynn, 1982), the results can be shown to arise from numerous methodological defects, such as selective sampling of children (Stevenson & Azuma, 1983). (It should also be noted that in none of our samples were there indications of general sex differences in cognitive ability.)

Parents' Educational Status. The amount of education received by a child's parents is commonly found to be positively related to the child's level of achievement. Perhaps our results could be explained by educational differences between parents. Perhaps the Japanese and Chinese parents had exceeded the American parents in educational levels. Again, this was not the case. Over half the American mothers had attended college (58 percent), a figure much higher than that found in Sendai (22 percent) or Taipei (13 percent). Nearly twice as many American fathers were college graduates (66 percent) than were the fathers of the children in Sendai (39 percent) or Taipei (32 percent). Even though the parents' educational status may contribute significantly to the prediction of academic performance of children within a country, it did not account for the differences in children's performance from one country to another.

Teachers

The training teachers have received may contribute to their pupils' academic success. Information on this and other areas was obtained from the children's teachers, who were very cooperative in responding to our questions.

The American teachers were all university or college graduates. One-fourth had a master's degree and one had a Ph.D. Nearly all had majored in education as undergraduates; 76 percent had majored in elementary education. In Taiwan, nearly all teachers (85 percent) were graduates of a five-year teachers' college in which they enrolled after graduating from middle school. These teachers began their teaching careers after attending the equivalent of three years of high school and two years of college. Among the Japanese teachers, 68 percent had a bachelor's degree. Of these, 73 percent had majored in elementary education. Teachers in Minneapolis had taught an average of 15 years, the Chinese and Japanese teachers, 17 years. There is little basis for explaining cross-national differences in the children's performance in terms of the training or experience of their teachers.

Teachers were asked about the major problems or difficulties they encountered as teachers. American and Japanese teachers indicated that their major problem was the demands made on their time. For the Chinese teachers, the greatest problem was the expectations of the parents. The second most frequently mentioned problem for both Chinese and Japanese teachers was meeting children's individual needs. This is understandable when the teacher is responsible for classrooms of 40 or 50 children, but American teachers also mentioned this problem frequently, even though there were no more than 25 children in their classrooms.

One type of problem mentioned by many American teachers, but not by Chinese or Japanese teachers, was they that were being asked to assume too many different roles. Here is how one Minneapolis teacher put it:

> One of my big problems is being held responsible for things which are not strictly a teacher's responsibility. I feel many of the things I am asked to teach should be the responsibility of the parents. I feel parents should teach the child how to behave and to be responsible for his/her own discipline. Teachers should only need to remind the child occasionally about such behavior. I feel the same about social adjustment, interpersonal relationships, sex education, moral character, self-image and guidance, and similar areas. Since each family has different ideas about these things, teachers and schools are always criticized for ideas taught in these areas. There is little agreement even in homogeneous communities.

Candid replies such as this one suggest that many American elementary school teachers are

being asked to take on too many functions other than teaching, including the roles of counselor, family therapist, and surrogate parent. Their responses imply that if they could shed some of these nonacademic functions, they would spend more of their time actually teaching.

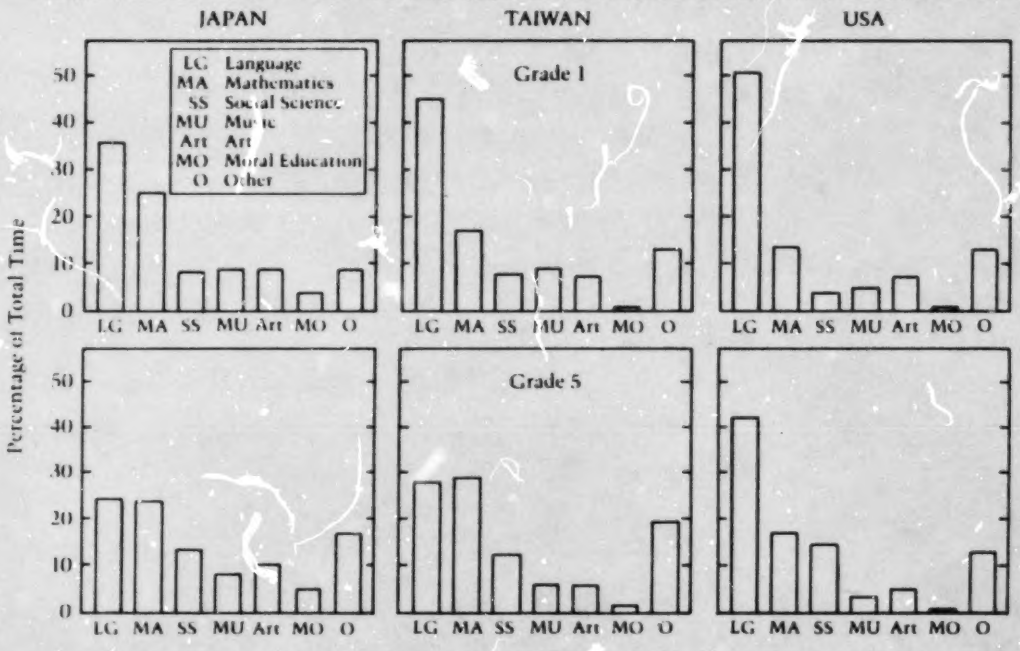
Despite their problems, the majority (69 percent) of the American teachers said they would choose teaching again if they were deciding on a career. This was lower than the percentage of Chinese teachers (86 percent), but, surprisingly, higher than among Japaneses teachers (54 percent).

Time Spent in Instruction

The extent of learning depends, in part, upon the amount of time spent in practice. We therefore looked at the amount of time children are in school. Children in Taipei and Sendai spend approximately 240 days in school each year. The American school year varies from state to state, but typically comprises only 178 days. In all three cities in our study, children are in school between six and a half and seven hours in first grade, but by the fifth grade the Chinese children are in school nearly two hours more a day than the American children, and the Japanese children one hour more a day. In addition, classes are held for a half day on Saturday in both Taipei and Sendai. Overall, therefore, the Chinese and Japanese children had received many more hours of schooling prior to taking the reading and mathematics tests than had the American children.

How is the time spent on those days that the children are in school? We are able to provide a detailed answer to this question. In the classroom observations, one of the variables recorded was the subject being taught. Highly reliable estimates of the proportion of time the teachers spent on the various subjects can be derived from these records. These proportions appear in Figure 1.

FIGURE 1
Proportion of Classroom Time Spent on Various Subjects



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American teachers spent a much lower proportion of time on mathematics instruction than on language arts. The time was similarly divided in first-grade Japanese and Chinese classrooms. By the fifth grade, however, teachers in Japan and Taiwan spent equal amounts of time on the two subjects. In every American first-grade classroom, a greater proportion of time was spent on teaching language arts than on mathematics. The distributions overlapped in Sendai and Taipei; that is, in some classrooms the teachers spent as much time teaching mathematics as they did teaching reading. Among American fifth-grade classrooms, however, there were classrooms in which our observers *never* found the teacher engaged in instructing the children in mathematics. Some time undoubtedly was spent teaching mathematics in these classrooms, but it must have been a very small amount. The proportion of time spent on reading instruction in the American fifth-grade classrooms varied from less than 10 percent to nearly 80 percent.

One possible interpretation of the low mathematics achievement of American children, then, is that they spend less time in school, and of the time they spend in school, a smaller proportion is devoted to mathematics than is the case in other countries.

Merely looking at the amount of time spent in an activity does not tell the whole story. Exposing children to instruction does not ensure that they will learn. The teacher must have the children's attention. We found strong evidence that Japanese and Chinese children were much more likely to attend to the teacher and their work than were the American children. Children were engaged in activities we designated as inappropriate much more frequently in American classrooms. Coded as inappropriate were such behaviors as talking to peers during class, asking irrelevant questions, wandering about the room, or staring into space. Thus, American children not only spend less time in school, they also spend a much greater proportion of class time in activities that interfere with learning.

Homework. Learning occurs at home as well as at school. Some home learning takes place as children practice their lessons through homework. The responses of American parents and teachers to several questions about homework show that neither group generally considers homework of great value. This attitude is in marked contrast to that of parents and teachers in Japan and Taiwan. As a consequence, American children spend much less time on homework than do Japanese children, and both groups spend vastly less time on homework than Chinese children.

One indication of the time spent on homework comes from estimates made by the children's mothers, who were asked how much time their child typically spent on homework each weekday and during each day of the weekend. American children clearly spend small amounts of time doing homework. On weekdays, American first-grade children were estimated to spend an average of 14 minutes a day on homework, and in fifth grade, 46 minutes a day. In Japan, the corresponding averages were 37 and 57 minutes. In Taiwan, first graders were estimated to spend an average of 77 minutes a day on homework, and fifth graders 114 minutes. On weekends, American children studied even less—an estimated seven minutes on Saturday and 11 minutes on Sunday. The corresponding values for the Japanese children were 37 and 29 minutes, and for the Chinese children, 83 and 73 minutes—and this in addition to the half day in school on Saturday.

Homework is not limited to the times school is in session. In Japan, where the school year begins in April, 68 percent of the teachers made homework assignments during the July and August vacation—the longest vacation during the school year. During Christmas vacation in Minneapolis—the children's longest vacation—only 12 percent of the teachers gave their pupils homework to complete. All teachers in Taipei reported that they gave their pupils homework to complete during their winter vacation, the vacation that corresponds to the American Christmas vacation.

Other Activities

Children in the three countries also differ in the ways they spend their time in other activities. According to their mothers, American children

spent the most time playing, the least time reading for pleasure, and a good deal of time watching television. These estimates appear in Figure 2.

Another activitity in which American children participated each day was doing household chores. Ninety percent of the first graders and 95 percent of the fifth-grade American children had chores assigned to them. This is in great contrast to the Chinese children, of whom only 17 percent at first grade and 28 percent at fifth grade were required to do chores. The corresponding percentages for Japanese children were 70 and 76. Why do so few Chinese mothers assign their children chores? When one Chinese mother was asked why she did not have her child do any chores, she responded, "It would break my heart": doing chores would consume time that her child should devote to studying.

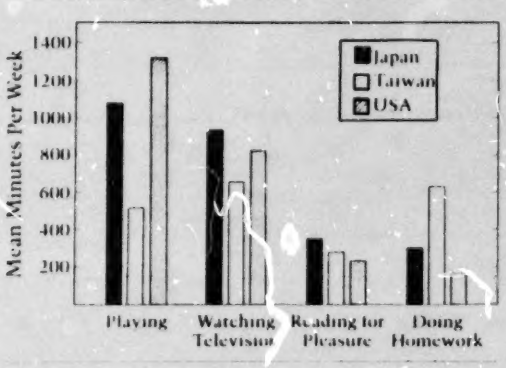

FIGURE 2
Mothers' Estimates of How Children Spend Time Outside School

Finally, there is a difference in the amount of time that children reportedly spend asleep. According to the mothers of both first and fifth graders, American children sleep over an hour more each night than Chinese children, and nearly a half hour more than Japanese children. We have no explanation for these differences, except that American children may be more fatigued because of the energy spent in active play.

Evaluations by the Mothers

The mothers were asked to evaluate cognitive and personality characteristics that might influence their children's academic achievement. Ratings were made on nine-point scales, each anchored by five defining statements, ranging from "much below average" to "much above average." Abilities were defined by several words or a short phrase. Great care was taken to select words and phrases that express the same nuances of meaning in the three languages.

The outcomes are immediately salient (see Figure 3). First, the mean ratings depict an above-average child on nearly every variable in each culture. Mothers had been asked to compare their child with "other children his/her age." If, as we assume, they were comparing their children with other local children, the ratings indicate a positive bias. Second, there is a consistent tendency for American mothers to give their children the highest average ratings and for Japanese mothers to give their children the lowest. Had no biases been operating, the mean ratings should have been very similar. From this perspective, the bias of American mothers was greatest, followed by that of the Chinese mothers; Japanese mothers can be considered the least positive—or, since the mean ratings made by Japanese mothers were also above average—the most realistic.

At a later point in the interview, the mothers were asked to rate themselves on variables comparable to those on which they had rated their children. "Think of the time you were in elementary school," they were told, "Rate yourself compared to the other children in your grade." As was the case in the evaluations of their children, the self-evaluations of American mothers were generally higher than those of the Chinese and Japanese mothers.

The high esteem the American mothers had for their children's cognitive abilities and also their own extended to their evaluations of how well their children were doing in school and of the quality of their education. When asked about their child's current academic performance, few Chinese and Japanese mothers indicated they were "very satisfied." Even though their children performed least well, American mothers were the

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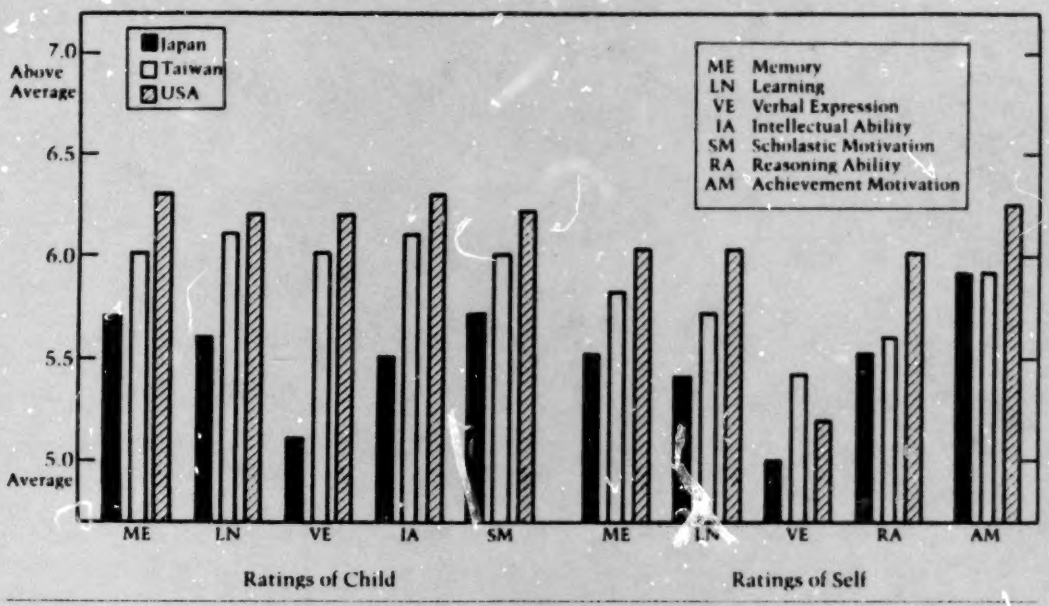

FIGURE 3
Mothers' Ratings of Abilities of Child and Self

most positive. As can be seen in Figure 4, more than 40 percent of the American mothers described themselves as being "very satisfied." Nearly a third of the Chinese and Japanese mothers said they were "not satisfied" with their children's performance, but only one in ten American mothers expressed such dissatisfaction.

American mothers also were very pleased with the job the schools were doing in educating their children. The mothers were asked, "How good a job would you say ___'s school is doing this year in educating ___?" Among American mothers, 91 percent judged that the school was doing an "excellent" or "good" job. Only 42 percent of the Chinese mothers and 39 percent of the Japanese mothers were this positive. Instead, the majority of the Chinese and Japanese mothers considered that the schools were doing a "fair" job.

Nor did American mothers express any dissatisfaction with the level of difficulty of the school curriculum. Mothers in all three cities strongly believed that the curriculum of their child's school was about right: 89 percent of the American mothers, 83 percent of the Chinese mothers, and 84 percent of the Japanese mothers.

These data pose an interesting paradox. American mothers were generally the most positive about their children and themselves and they expressed the most positive evaluations of their children's scholastic experiences and progress. At the same time, the American children generally demonstrated the lowest levels of academic achievement. Given these findings, one wonders how practical it is to push now for educational reform in the United States. Schools can only respond to the needs expressed by the parents and citizens who provide their financial support. There is little indication in these data that large numbers of American parents find sufficient basis for dissatisfaction to alter their attitudes toward American education.

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Parental Beliefs

Experiences provided by parents may be strongly influenced by their general beliefs about the components of success. For example, parents who emphasize ability as the most important requisite for success may be less disposed to emphasize the need to work hard than would parents who believe success is largely dependent upon effort.

Our exploration of cross-national differences in mothers' beliefs about the relative importance of such factors involved several steps. The mothers first were asked:

> Many factors contribute to children's academic performance in school, such as the child's effort, the child's natural ability, the difficulty of the schoolwork, and luck or chance. Which of these do you think is the most important in determining a child's performance in school? Which is next in importance? Next? Next?

After the four choices had been made, the interviewer continued:

> Let's say you give 1 point to (the item ranked lowest by the mother) according to its importance in determining children's performance in school. Now say you had a total of 10 points you could give. How many points do you think you would give (next lowest item)? To (item ranked second)? To (item ranked highest)?

Mothers in all three countries gave the same rank orders to the items. Effort was given the greatest number of points, ability was second, task difficulty was third, and luck was fourth (see Figure 5). There was no difference between the countries in the number of points assigned to luck, and few points were given to task difficulty. Points were divided primarily between effort and ability. The average difference between the ratings of these two characteristics by American mothers was small (.53), larger (1.76) for the Chinese mothers, and largest for the Japanese mothers (2.71). Ratings did not differ significantly according to the child's grade in school or the child's sex.

The adage that Americans are confirmed believers in the value of hard work is not strongly supported by these data. Indeed, the description seems more appropriate for Chinese and Japanese mothers. Parents who believe success depends more upon ability than effort are less likely to require their children to work hard at learning than parents who believe that effort is more important. The difference may explain why American children spend so little time doing homework, and also why they were found to be less likely than Chinese and Japanese children to attend after-school classes. The greater emphasis of American mothers on ability may be another variable, then, that underlies their children's lower achievement in elementary school.

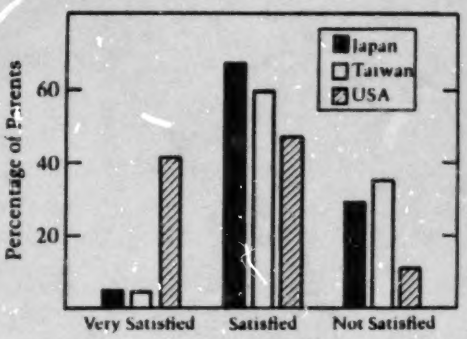

FIGURE 4
Mothers' Attitude toward Child's Academic Performance

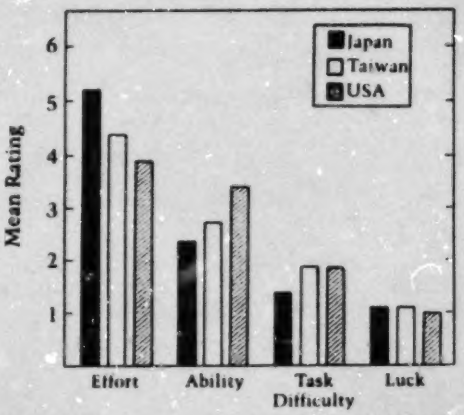

FIGURE 5
Mothers' Ratings of Factors Contributing to Academic Success

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Assisting the Child in School

We asked the mothers many questions about factors that might be related to their children's scholastic achievement. Among these was, "How do you think parents can best help their children do well in school?" Several types of response are obvious: parents can undertake actions that involve their children, the teachers, or the school. Of particular interest here are the answers that fell within the area of parent-child interaction. The most frequently mentioned categories of response were:

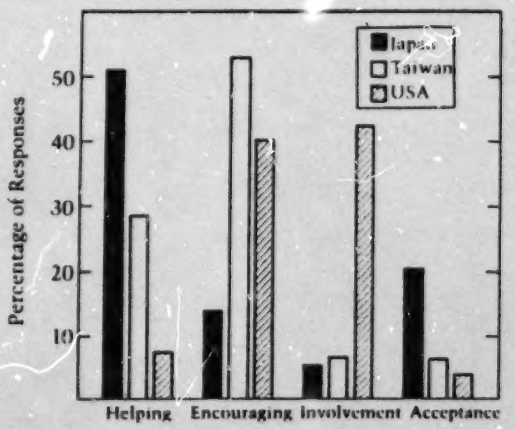
1. *Helping.* Helping the child with homework, supervising homework, reading to the child, helping the child during the preschool years, participating in learning experiences with the child.
2. *Encouraging.* Encouraging a good attitude, supporting the child's interests, expressing positive feelings about the child, being concerned about the child, being patient, being understanding, stressing the importance of education.
3. *Involvement.* Interacting and communicating with the child, taking an interest in the child's experiences at school, being aware and informed of what is going on in school, being available to the child.
4. *Acceptance.* Accepting the child as the child is.

Responses in these four categories, expressed as a percentage of the total number of responses that involved parent-child interaction, appear in Figure 6. The greatest number of responses by the Japanese mothers fell into the category of helping their child—a reminder of the term *kyoiku mama*: the "education mom" who assumes responsibility for directing, supervising, and assisting the child's learning. Remarkably few responses—less than 10 percent—by the American mothers fell into this category. American mothers were likely to encourage their children or become involved with their children; over 80 percent of their responses were in these categories. Nearly 80 percent of the Chinese mothers, in contrast, suggested that they would encourage their child or would offer to assist their child. (It should be pointed out that in Chinese families, parents are not the only source of assistance; older siblings and other relatives often help as well.) Accepting their children as they are was a much more common response of the Japanese mothers than of the Chinese or American. These differences are very large and offer clear examples of cross-national differences in parental beliefs.

Conclusions

The mirror we hold before us is often too small to reflect an appropriate image of ourselves in relation to the world about us. As a result, the views we hold of our status and significance are often distorted. This seems to be the case with our image of the academic achievement of American children. As long as we look only at our own country, we may find cause to deplore the poor performance only of certain subgroups of our population, but when we broaden our perspective to include children from other countries, we have cause for more general alarm. From the data we have presented, as well as data from other cross-national studies (e.g., Comber and Keeves, 1973; Husén, 1967), it is clear that we should not limit our attention to a particular segment of the population or a particular

FIGURE 6
Mothers' Responses to Question "How Can Parents Best Help Their Children Do Well in School?"



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grade level. Although a small proportion of American children perform superbly, the large majority appear to be falling further and further behind their peers in other countries.

Changing policies governing American schools is a formidable political, social, and economic task. We can begin by asking questions about our current practices and attempting to modify policies that are impeding our children's progress in school. Some specific questions that arise from the research reported here are worth considering:

Should we not increase the number of days our children attend school each year, and the amount of time they spend in school each day?

Should we not ask that children spend more time at home working on homework?

Should we not propose that teachers be hired to teach academic subjects, and not to pursue various other social goals?

Should we not give parents information that will allow them to make a more realistic appraisal of their children's cognitive abilities and levels of scholastic achievement?

Should we not ask for modifications in school policies and teaching practices so that the time children spend in school is spent on productive activities?

Should we not recruit parents as partners in the educational process, so that the parents participate directly in their children's education, especially during the elementary school years?

Viewing ourselves in relation to others may not always be flattering, but it is difficult to make sound assessments of our ourselves unless we have the courage to make such comparisons. In the case of our children's academic achievement, the picture we thus obtain is disturbing, but it is one for which remedies do not seem inordinately difficult to achieve.

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